

Sp. 60. *Walkeriella*.

G. Walkeriella, mihi.

Cleod. Cytisella, Curt., vol. 14, pl. 671 (non *T. Cytisella*, Tis., Tr.)

Astyages Picæpennis, St. Mus. (non Haw.)

Taken by Mr. Curtis, 18th July, on a hill at Glengariff, in Ireland, and by Mr. F. Walker, in the Isle of Wight.

The name *Cytisella* being previously occupied by Treitschke for another species of *Gelechia*, I have had to give the present species another name, and have called it in honour of one of its early discoverers.

V. On *Elachista æratella*, Zeller, and several Species with which it is likely to be confounded. By H. T. STAINTON, Esq.

[Read 5th November, 1849.]

THIS species is briefly described by Zeller, in his catalogue of *Tineidæ*, in the Isis of 1839, and is there placed next to *Festaliella*, H.: it indeed bears a close resemblance to that species in having a very perplexed synonymy; and as a paper of mine on the synonymy of *E. Festaliella* was considered of sufficient importance to be published in the Society's Transactions, I have thought that a like indulgence might be accorded to the present paper, which includes several species which have perplexed many of our Entomologists, but which I hope to be able to make sufficiently clear and distinct, to enable any Entomologist of ordinary capacities at once to separate.

The species are *Æcophora fusco-ænea*, Haw.; *Æcophora senescens*, Sta.; *Æcophora fusco-cuprea*, Haw.; *Gelechia tenebrella*, Tr.; *Gelechia tenebrosella*, F. v. R.; *Elachista æratella*, Z.; *Elachista fusco-ciliella*, Sta.; and *Elachista modestella*, D.

All these species are destitute of markings on the anterior wings, and in all, the colour of the anterior wings is more or less of a greenish or brownish copper; it would thus appear, at first sight, that it would be very difficult to distinguish them, but this is by no means the case. The form of the posterior wings at once separates the *Æcophoræ* from the *Gelechiæ*, and from the

Elachistæ, and the *Gelechiæ* from the *Elachistæ*, and even *Elachista æratella* from the other two species in the same genus.

I proceed now to describe the three species of *Æcophora*, and as they are sufficiently distinguished from the *Gelechiæ* and *Elachistæ* by the form of the posterior wings, I shall only have to point out the distinctive characters by which they can be separated from each other.

They all three resemble *Æc. grandipennis* (which I believe is now in most of our collections), in the form of the posterior wings (see Plate III. fig. 20), and in the peculiar method of sitting when alive, with the wings going to a point.

Sp. 1. *Æcophora fusco-ænea*, Sta. Cat., p. 14, No. 29.

Porrectaria fusco-ænea, Haw. Lep. Brit. 537, No. 21.

Pancalia fusco-ænea, St., Illust. iv. 276.

Allied to *Æc. grandipennis*, but smaller and greener, and anterior wings rather narrower in proportion to its size. Larger than *Æc. senescens*, and without the white scales on the disk of the anterior wings. Larger than *Æ. fusco-cuprea*, and much greener in colour.

Haworth's description — "Alis anticis fusco-æneis, lucidis, tinctura cupri; alis posticis lineari-subulatis, atris, lucidis. Exp. alarum 7 lin."—appears to me quite distinct enough to identify the species, especially when contrasted with his description of *Porrect. fusco-cuprea*, which is represented as being smaller and less bronzy (less green).

This appears a scarce species; it was formerly taken by Mr. Chant, but I have seen no recent specimens, except two that Mr. Allis met with near Grassington in Wharfedale, in June. The specimens mentioned by Mr. Stephens as being taken in Darenth Wood, in June, are not referable to this species; they are *Gelechia tenebrella*.

Sp. 2. *Æcophora senescens*, Stainton.

seliniella, Sta. Cata. p. 13, No. 30 (non Z.)

Slightly larger than *fusco-cuprea*, and at once distinguished from it by its greener anterior wings being clothed with numerous white scales; these white scales equally distinguish it from *fusco-ænea*, from which it differs also in being smaller, and the anterior wings being less glossy.

The *Æc. seliniella* of Zeller, which I had imagined this to be, is much larger, nearly as large as *Æc. fusco-ænea*, but has broader anterior wings, and much broader posterior wings. (I have two specimens sent me by Herr Zeller.) My specimen of *senescens* still remains unique.

Sp. 3. *Æcophora fusco-cuprea*, Sta. Cat. p. 14, No. 31.

Porrectaria fusco-cuprea, Haw. Lep. Brit. p. 537, No. 22.

Pancalia fusco-cuprea, St. Illust. iv. p. 276.

Æcophora parvella, Mann. in litt.

Differs from *fusco-ænea* in being smaller and much browner, and the anterior wings rather broader in proportion to its size; differs from *senescens* (which it resembles in size) in not having any white scales on the disk of the anterior wings.

Haworth's description—"Alis anticis fusco-cupreis, immaculatis. Præcedenti (*fusco-ænea*) nimis affinis at minor, alis latioribus ratione magnitudinis; posticis fuscis nitidis. Exp. alarum $5\frac{1}{2}$ lin."—very well identifies this species. The female of this species has a large oval white spot on the under side of the abdomen.

Not scarce with Mr. Sircom on Durdham Downs. I have taken it on the downs at Mickleham, in July. The two specimens mentioned by Mr. Stephens, as having been taken by him at Ripley, in June, 1827, are not this species; they are *Gelechia tenebrosella*.

We now come to the two species of *Gelechia*, *tenebrella* and *tenebrosella*. These are at once distinguished from the *Æcophoræ* and *Elachistæ* by their trapezoidal posterior wings (see Pl. III. fig. 21), and by their longer recurved palpi.

Sp. 4. *Gelechia tenebrella*, Zeller, Isis, 1839, S. 201.

Douglas, Tran. Ent. Soc., N.S., vol. i.
p. 16.

Æcophora tenebrella, Treitschke, x. 3, 216.

Tinea tenebrella, Hübner, 434?

Glyphipteryx subcuprella, Stephens, Illust. iv. p. 273.

Gelechia metallella, Sta. Catal. p. 18, No 42 (non St.)

Var. *Gelechia unicolorella*, Zeller, in litt.

At once distinguished from *G. tenebrosella* by the unicolorous antennæ. The typical insect has the anterior wings coppery-

brown, that is, with a purple tint; in the variety *unicolorella* this purple tint is entirely wanting, the wings being then of an unicolorous greenish hue.

The *Gly. subcuprella* of Mr. Stephens's cabinet is truly this species, but the description would apply equally well to *fusco-cuprea*.

- Sp. 5. *Gelechia tenebrosella* (F. v. R.), Zeller, Isis, 1839, S. 201.
Sta. Cat. p. 18, No. 43.
Douglas, Trans. Ent. Soc., N. S.,
vol. i. p. 16.

Readily distinguished from *G. tenebrella* by the white tips to the antennæ; I am not aware that this species ever occurs destitute of the purple tint on the anterior wings.

We now arrive at the three *Elachistæ*, and, as I have already mentioned, *æratella* differs considerably in the form of the posterior wings from *modestella* and *fusco-ciliella*. (See Pl. III. fig. 22, posterior wing of *æratella*, and fig. 19, posterior wing of *modestella*.)

- Sp. 6. *Elachista æratella*, Zeller, Isis, 1839, S. 212 (non Sta.)
Glyphipteryx metallella, Stephens, Illust. iv. 273 (non Sta.)

This is also distinguished from *modestella* and *fusco-ciliella* by its shorter and thicker antennæ, and by the much deeper colour of the anterior wings, which considerably resemble those of dark specimens of *G. tenebrella*, but are more brilliant. I annex a translation of Zeller's description—"as large as, and of the habit of, *Gelechia tenebrella*; anterior wings dark greenish, bronze-coloured; the palpi short, thin, and pointed; the antennæ much shorter than the anterior wings."

On the 11th of last month, Mr. Wilkinson brought to me to be named a specimen of this species; I soon found it was a stranger to me, though evidently coming near the *æratella* of my catalogue; and, on referring to Zeller's descriptions in the Isis, I at once perceived that I had erred in referring Mr. Sircom's species to the *æratella* of Zeller, for that this was most decidedly Zeller's insect. Mr. Wilkinson having several specimens of the insect, taken near Brighton in June, kindly begged my acceptance of that which he had brought to be named. Last Wednesday, at Mr. Douglas's urgent request, I went to Mr. Stephens, to examine his *Glyph*.

metallella, and, to my extreme astonishment, found there two specimens of this insect, which are doubtless those mentioned and described in the Illustrations as *metallella*; and had this description any character by which to identify the species, this name being older than *æratella* should have been retained, but unfortunately neither the peculiar form of the posterior wings, nor the peculiarly short and thick antennæ, are mentioned, so that I have been compelled to adopt Zeller's name in preference. This species has been taken by Mr. S. Stevens in Devonshire.

Sp. 7. *Elachista fuscociliella*, Stainton.

æratella, Sta. Catal. p. 25, No. 18 (non Z.)

Smaller and darker than *modestella*, and easily distinguished by the fuscous cilia of the posterior wings; antennæ dark, unicolorous.

Mr. Sircom has not again met with this species.

Sp. 8. *Elachista modestella*, Sta. Cat. p. 25, No. 17.

Butalis modestella, Dup. xi. p. 347, pl. 299, f. 8.

Astyages serratella, Stephens, Illust. iv. 280.

Larger and paler than the preceding, and at once recognized by the ochreous cilia of the posterior wings; the antennæ are not annulated with white, but appear through a lens alternately pale and dark.

The name *serratella*, St., cannot be retained for this, as there is already a closely allied species of that name, *serratella*, Tr.

This species frequents oaks in May; I found it not very scarce at Lewisham, last spring.

TABLE OF THE FOREGOING SPECIES.

I. Posterior wings broadish, with distinct anal angle.

1. *Æcophora fusco-ænea*. Exp. $6\frac{1}{2}$ lines; anterior wings bronzy green.
2. *senescens*. Exp. $5\frac{1}{2}$ lines; anterior wings greenish, with white scales.
3. *fusco-cuprea*. Exp. $5\frac{1}{4}$ lines; anterior wings coppery brown.

II. Posterior wings trapezoidal.

1. *Gelechia tenebrella*. Antennæ unicolorous.
2. *tenebrosella*. Antennæ brown, with white tips.

III. Posterior wings lanceolate, with prolonged point.

1. *Elachista æratella*.

IV. Posterior wings lanceolate (point not prolonged).

1. *Elachista fusco-ciliella*. Cilia of posterior wings fuscous.
2. *modestella*. Cilia of posterior wings ochreous.

VI. *A Monograph of the British Species of the Genus*
Micropteryx of Zeller. By H. T. STAINTON, Esq.

[Read February 4th, 1850.]

THIS interesting and very distinct group of insects is sadly in want of investigation; the metamorphoses of none of the species are known, and several of our species were in such confusion, that in my catalogue I lumped together, as one species, three which are truly quite distinct.

The number of species will probably be much augmented by more active investigations; several of the known species appear very early in the season,—for instance, *purpurella* in February, and *unimaculella* and *semipurpurella* in March; and it is exceedingly probable that other equally early species lurk undetected. Several other species occur on the continent.

From the affinities of this group to the *Adelæ* (long horns), of which the larvæ are known to be case-bearers, feeding on various plants, there is little doubt but that the larvæ of these insects feed in a similar way; and if those collectors who take *calthella* in plenty, would devote a little of their time to the furtherance of science, by searching for the larvæ and pupæ of that insect, though they might not enrich their collections by so doing, they would have a better claim to the title of Entomologists.

The genus is thus characterized by Zeller, in the *Isis*, 1839: "With thickly woolly head, in the hairs of which the long convergent downy-haired palpi are concealed, the antennæ hardly longer than the body, the wings moderately long-fringed, the posterior oval-lanceolate."

The structure of the palpi is very peculiar; they are six-jointed, and are folded over themselves, so that the extremity lies